Dept. Genetics, University of Wisconsin, Madison 6, Wis.

Dear Dr. Fredericq:

Your interesting paper on the M-colicin activity of V/1 etc. (in Antonie van Leeuwenhoek, April,1951), just came to hand. This seems a most extraordinary observation. Have you considered the likelihood the the M-colicin is the result of recombination between a phage-like element of V and T1? This would presuppose that the colicin V is actually an incomplete or fragmented phage, and that colicin production was a sort of lysogenicity. One point that was puzzling is the interrelationship of T1 and T7. Resistance to these phages is usually independent. Is there any difference in the activities of V/1 and V/7 on B/1,5 and B/7 ? Are non-colicidal mutants of V known so that one could determine whether the prior presence of V-colicin is required for M-colicin formation with T1?

A specific point of understanding or translation: at the bottom of p. 104, you refer to "un mutant V/5 lysogene". Am I correct in thinking that this was a culture carrying residual T5, and not a true lysogenic strain from which nonlysogenic V/5 is readily isolated?

I hope you will have had time to try your hand at recombination in E. coli K-12, and will be interested to have your comments. The colicidal types you sent have been very valuable in the classification of new types.

Yours sincerely,

Joshua Lederberg